

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

ROKU® FPF Brandschutzschaum, 2-K-Kartuschen Komp. A

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Hardener

1.3. Details of the supplier of the safety data sheet

Company name: Rolf Kuhn GmbH
Street: Jägersgrund 10
Place: D-57339 Erndtebrück
Telephone: +49 2753 5945-0
Telefax: +49 2753 5945-21
Contact person: Jörg Six
e-mail: joerg.six@rolfkuhngmbh.com (Contact for technical information)
Internet: www.kuhn-brandschutz.com

1.4. Emergency telephone

number: +49 (0) 6132 / 84463 (GBK GmbH)
Responsible for the safety data sheet: GBK GmbH, Ingelheim,
sds@gbk-ingelheim.de

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Respiratory or skin sensitisation: Resp. Sens. 1

Respiratory or skin sensitisation: Skin Sens. 1

Carcinogenicity: Carc. 2

Specific target organ toxicity - single exposure: STOT SE 3

Specific target organ toxicity - repeated exposure: STOT RE 2

Hazard Statements:

Harmful if inhaled.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause respiratory irritation.

Causes serious eye irritation.

Causes skin irritation.

May cause an allergic skin reaction.

Suspected of causing cancer.

May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazardous components which must be listed on the label

Diphenylmethanediisocyanate, isomers and homologues

Signal word: Danger

Pictograms: GHS07-GHS08



Hazard statements

H332 Harmful if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H319 Causes serious eye irritation.
H315 Causes skin irritation.

H317	May cause an allergic skin reaction.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection.
P285	In case of inadequate ventilation wear respiratory protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P501	Disposal in accordance with local regulations.

2.3. Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Preparation with isocyanates

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
	Diphenylmethanediisocyanate, isomers and homologues	50 - 90 %
9016-87-9	Carc. Cat. 3, Xn - Harmful, Xi - Irritant R20-36/37/38-40-42/43-48/20	
	Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373	

Full text of R, H and EUH phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Remove contaminated soaked clothing immediately.
In the event of persistent symptoms receive medical treatment.
Take away from danger area and lay down affected person.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.
If patient is not breathing, apply artificial respiration.
Refer for medical treatment.

After contact with skin

Wash contaminated skin with plenty of water and soap or with liquid polyethylene glycol.
Consult a doctor if skin irritation persists.

After contact with eyes

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical treatment by eye specialist.

After ingestion

Do not induce vomiting.
Rinse out mouth thoroughly with water.
Summon a doctor immediately.
Induce vomiting only upon the advice of a physician.

4.2. Most important symptoms and effects, both acute and delayed

Harmful by inhalation.
Irritating to eyes, respiratory system and skin.
May cause sensitization by inhalation and skin contact.
With hypersensitive people, reactions as cough or difficulty of breathing may appear even with tiny concentrations of isocyanates; therefore keep room aerated and ventilated.

4.3. Indication of any immediate medical attention and special treatment needed

Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Foam, carbon dioxide (CO₂), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Fire may produce:

Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x).

Hydrogen cyanide (HCN)

5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective suit.

Additional information

Cool containers at risk with water spray jet.

Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.

Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

In case of vapour formation use respirator.

Ensure adequate ventilation.

Remove persons to safety.

Use personal protective clothing.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).

Shovel into suitable container for disposal.

6.4. Reference to other sections

Container should not be gas-tight closed.

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed.

Vapours are heavier than air and spread along ground.

Avoid contact with the skin and the eyes.

Do not breathe vapours.

Local exhaust.

Use only in thoroughly ventilated areas.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep containers tightly closed in a cool, well-ventilated place.

Advice on storage compatibility

Exothermic reaction with:

Acids and bases.

Water, amines, alcohols

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

7.3. Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Do not inhale vapours.

Avoid contact with eyes and skin.

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Take off immediately all contaminated clothing.

Eye/face protection

Eye wash bottle with pure water (EN 15154).

Tightly fitting goggles (EN 166).

Hand protection

Chemical-resistant gloves (EN 374). Safety gloves for the site (EN420, Cat. 1 or 2).

Follow the recommendations of the glove manufacturer for breakthrough properties especially for workplace conditions involving mechanical stress and contact duration.

Skin protection

Long sleeved clothing (EN 368).

Single-use coverall

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid

Colour: Brown

Odour: Musty

Changes in the physical state

Melting point: < 10 °C

Initial boiling point and boiling range: ca. 330 °C DIN 53171

Pourpoint: - 30 °C DIN/ISO 3016

Flash point: < 204 °C DIN EN 22719 / ISO 2719

Lower explosion limits: n.d.

Vapour pressure: < 0,0001 hPa
(at 25 °C)

Vapour pressure: 20 hPa EC A 4
(at 50 °C)

Density (at 25 °C): 1,22 g/cm³ DIN 51757

Water solubility (at 20 °C): Reacts with water.

Ignition temperature: > 600 °C DIN 51794

Viscosity / dynamic (at 20 °C): 100 mPa·s DIN 53019

9.2. Other information

Decomposition temperature: > 200°C

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

No data available.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

10.5. Incompatible materials

Acids and bases.

Water, amines, alcohols

10.6. Hazardous decomposition products

Hydrogen cyanide gas, Carbon monoxide (CO), carbon dioxide (CO₂) and nitrogen oxides (NO_x).

Further information

No decomposition if stored and applied as directed.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Harmful if inhaled.

LD50/oral/rat: > 10000 mg/kg

LC50/inhalation/rat: 0,493 mg/l (4h, spray)

ATEmix calculated

ATE (inhalative vapour) 11,61 mg/l; ATE (inhalative aerosol) 0,327 mg/l

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
9016-87-9	Diphenylmethanediisocyanate, isomers and homologues				
	oral	LD50	> 10000 mg/kg	Rat	OECD 401
	dermal	LD50	> 9400 mg/kg	Rabbit	OECD 402
	inhalative vapour	ATE	11 mg/l		
	inhalative aerosol	ATE	1,5 mg/l		

Irritation and corrosivity

Causes serious eye irritation.

Causes skin irritation.

Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Diphenylmethanediisocyanate, isomers and homologues)

May cause an allergic skin reaction. (Diphenylmethanediisocyanate, isomers and homologues)

STOT-single exposure

May cause respiratory irritation. (Diphenylmethanediisocyanate, isomers and homologues)

Severe effects after repeated or prolonged exposure

May cause damage to organs through prolonged or repeated exposure. (Diphenylmethanediisocyanate, isomers and homologues)

No observed effect level (NOEL); inhalativ: 0,2 mg/m³ (spray)

Carcinogenic/mutagenic/toxic effects for reproduction

Suspected of causing cancer. (Diphenylmethanediisocyanate, isomers and homologues)

Aspiration hazard

Based on available data, the classification criteria are not met.

Practical experience

Observations relevant to classification

Harmful by inhalation.
Irritating to eyes, respiratory system and skin.
May cause sensitization by inhalation and skin contact.

Other observations

With hypersensitive people, reactions as cough or difficulty of breathing may appear even with tiny concentrations of isocyanates; therefore keep room aerated and ventilated.

SECTION 12: Ecological information

12.1. Toxicity

LC0/Brachydanio rerio/96 h = > 1000 mg/l (*)

EC50/Activated sludge/3 h = > 100 mg/l (*)

EC50/Daphnia magna/24 h = > 1000 mg/l (*)

(*) Diphenylmethanediisocyanate, isomers and homologues

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
9016-87-9	Diphenylmethanediisocyanate, isomers and homologues					
	Acute fish toxicity	LC50	> 1000 mg/l	96 h	Brachydanio rerio	OECD 203
	Acute algae toxicity	ErC50	> 1640 mg/l		Scenedesmus subspicatus	OECD 201
	Acute crustacea toxicity	EC50	> 1000 mg/l	48 h	Daphnia magna	OECD 202

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

Further information

In aqueous systems, formation of insoluble and chemically inert (inactive) polyureas.

Do not flush into surface water or sanitary sewer system.

Low hazard to waters.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not discharge into the drains/surface waters/ground water. The waste code number must be agreed with the disposer / manufacturer / competent authority. Waste disposal according to local regulations.

Waste disposal number of waste from residues/unused products

080409 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other dangerous substances
Classified as hazardous waste.

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

Contaminated packagings are to be treated like the product itself.

Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

SECTION 14: Transport information

Land transport (ADR/RID); Marine transport (IMDG); Air transport (ICAO); Inland waterways transport (ADN)

14.1. UN number:

Not applicable. No hazardous material as defined by the transport regulations.

14.2. UN proper shipping name:

Not applicable. No hazardous material as defined by the transport regulations.

14.3. Transport hazard class(es):

Not applicable. No hazardous material as defined by the transport regulations.

14.4. Packing group:

Not applicable. No hazardous material as defined by the transport regulations.

14.5. Environmental hazards

Not applicable. No hazardous material as defined by the transport regulations.

14.6. Special precautions for user

Not applicable. No hazardous material as defined by the transport regulations.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable. No hazardous material as defined by the transport regulations.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

2004/42/EC (VOC): 0 %

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

DOT = Department of Transportation

TDG = Transport of Dangerous Goods

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant H- and EUH-phrases (Number and full text)

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

ROKU® FPF Brandschutzschaum, 2-K-Kartuschen Komp. B

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Polyol - Component

1.3. Details of the supplier of the safety data sheet

Company name: Rolf Kuhn GmbH
Street: Jägersgrund 10
Place: D-57339 Erndtebrück
Telephone: +49 2753 5945-0
Telefax: +49 2753 5945-21
Contact person: Jörg Six
e-mail: joerg.six@rolfkuhngmbh.com (Contact for technical information)
Internet: www.kuhn-brandschutz.com

1.4. Emergency telephone

number: +49 (0) 6132 / 84463 (GBK GmbH)
Responsible for the safety data sheet: GBK GmbH, Ingelheim,
sds@gbk-ingelheim.de

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Causes skin irritation.

Causes serious eye irritation.

2.2. Label elements

Signal word: Warning

Pictograms: GHS07



Hazard statements

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P332+P313 If skin irritation occurs: Get medical advice/attention.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

2.3. Other hazards

No data available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Polyol - Component

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
911-815-4	Reaction mass of propylene oxide and phosphorus oxychloride	1 - < 5 %
1244733-77-4	Xn - Harmful R22	
	Acute Tox. 4; H302	
01-2119486772-26		
269-123-7	Castor oil, sulfated, sodium salt	1 - < 5 %
68187-76-8	Xi - Irritant R36	
	Eye Irrit. 2A; H319	
01-2119943732-36		
221-201-1	bis(2-dimethylaminoethyl)(methyl)amine	1 - < 5 %
3030-47-5	T - Toxic, C - Corrosive, Xn - Harmful R20/22-24-34-52-53	
	Acute Tox. 3, Acute Tox. 3, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1, Aquatic Chronic 3; H311 H331 H302 H314 H318 H412	
01-2119979537-18		
401-680-5	A mixture of: isomers of 2-(2H-benzotriazol-2-yl)-4-methyl-(n)-dodecylphenol; isomers of 2-(2H-benzotriazol-2-yl)-4-methyl-(n)-tetracosylphenol; isomers of 2-(2H-benzotriazol-2-yl)-4-methyl-5,6-didodecyl-phenol. n=5 or 6	< 1 %
	N - Dangerous for the environment R51-53	
604-057-00-8	Aquatic Chronic 2; H411	

Full text of R, H and EUH phrases: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information**

Remove contaminated soaked clothing immediately.

In the event of persistent symptoms receive medical treatment.

After inhalation

Move to fresh air in case of accidental inhalation of vapours.

Refer for medical treatment.

After contact with skin

Take away immediately by mechanical means.

Wash off immediately with soap and plenty of water.

Consult a doctor if skin irritation persists.

After contact with eyes

Rinse thoroughly with plenty of water, also under the eyelids.

Summon a doctor immediately.

After ingestion

Do not induce vomiting.

Summon a doctor immediately.

4.2. Most important symptoms and effects, both acute and delayed

No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Treat symptoms.

SECTION 5: Firefighting measures**5.1. Extinguishing media****Suitable extinguishing media**

Foam, carbon dioxide (CO₂), dry chemical, water-spray.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use breathing apparatus with independent air supply.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Remove persons to safety.

Avoid contact with the skin and the eyes.

6.2. Environmental precautions

Do not discharge into the drains/surface waters/ground water.

6.3. Methods and material for containment and cleaning up

Take up mechanically and collect in suitable container for disposal.

6.4. Reference to other sections

Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Keep container tightly closed.

When using do not eat, drink or smoke.

Use only in thoroughly ventilated areas.

"ZH 1/34 ""Data Sheet: Polyurethane manufacture / Isocyanate (M 044)""",

"UVV ""Processing of Adhesives"" (VBG 81)"

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed.

Use only in well-ventilated areas.

Further information on storage conditions

Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

No data available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls



Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures

Wash hands before breaks and immediately after handling the product.

When using do not eat, drink or smoke.

Avoid contact with skin, eyes and clothing.

Eye/face protection

Eye wash bottle with pure water (EN 15154).

Tightly fitting goggles (EN 166).

Hand protection

Chemical-resistant gloves (EN 374). Safety gloves for the site (EN420, Cat. 1 or 2).

Follow the recommendations of the glove manufacturer for breakthrough properties especially for workplace conditions involving mechanical stress and contact duration.

Skin protection

Light protective clothing

Long sleeved clothing (EN 368).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Dark grey
Odour:	Amine like

pH-Value (at 20 °C):	10
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Changes in the physical state

Density (at 20 °C):	1,4 g/cm ³	DIN 51751
Water solubility (at 20 °C):	Soluble	
Viscosity / dynamic (at 20 °C):	30000 mPa·s	

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

No data available.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

No decomposition if stored and applied as directed.

10.5. Incompatible materials

No data available.

10.6. Hazardous decomposition products

No data available.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicokinetics, metabolism and distribution

No toxicological data available.

Acute toxicity

Based on available data, the classification criteria are not met.

Acute toxicity

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	Source
1244733-77-4	Reaction mass of propylene oxide and phosphorus oxychloride				
	oral	LD50	500 - 2000 mg/kg	Rat (male)	
	dermal	LD50	> 2000 mg/kg	Rat (male)	OECD 402 / EU B.3
	inhalative (4 h) aerosol	LC50	> 7 mg/l	Rat	OECD 403 / 433
3030-47-5	bis(2-dimethylaminoethyl)(methyl)amine				
	oral	LD50	1330 mg/kg	Rat	
	dermal	LD50	280 mg/kg	Rabbit	
	inhalative vapour	ATE	3 mg/l		
	inhalative aerosol	ATE	0,5 mg/l		

Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

Sensitising effects

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

Further information

Classification in compliance with the assessment procedure specified in the EC guidelines 1999/45/EC.

SECTION 12: Ecological information**12.1. Toxicity**

No data available.

CAS No	Chemical name					
	Aquatic toxicity	Method	Dose	[h] [d]	Species	Source
1244733-77-4	Reaction mass of propylene oxide and phosphorus oxychloride					
	Acute fish toxicity	LC50	51 mg/l	96 h	Pimephales promelas	
	Acute crustacea toxicity	EC50	131 mg/l	48 h	Daphnia magna	OECD 202

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No data available.

12.6. Other adverse effects

No data available.

Further information

Do not flush into surface water or sanitary sewer system.

Low hazard to waters.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Do not discharge into the drains/surface waters/ground water. The waste code number must be agreed with the disposer / manufacturer / competent authority. Waste disposal according to local regulations.

Waste disposal number of waste from residues/unused products

080410 WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants other than those mentioned in 08 04 09

Contaminated packaging

Empty containers should be taken for local recycling, recovery or waste disposal.

SECTION 14: Transport information

Land transport (ADR/RID); Marine transport (IMDG); Air transport (ICAO); Inland waterways transport (ADN)

14.1. UN number:

Not applicable. No hazardous material as defined by the transport regulations.

14.2. UN proper shipping name:

Not applicable. No hazardous material as defined by the transport regulations.

14.3. Transport hazard class(es):

Not applicable. No hazardous material as defined by the transport regulations.

14.4. Packing group:

Not applicable. No hazardous material as defined by the transport regulations.

14.5. Environmental hazards

Not applicable. No hazardous material as defined by the transport regulations.

14.6. Special precautions for user

Not applicable. No hazardous material as defined by the transport regulations.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable. No hazardous material as defined by the transport regulations.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulatory information

Water contaminating class (D): 1 - slightly water contaminating

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route

RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure

IMDG = International Maritime Code for Dangerous Goods

IATA/ICAO = International Air Transport Association / International Civil Aviation Organization

MARPOL = International Convention for the Prevention of Pollution from Ships

DOT = Department of Transportation

TDG = Transport of Dangerous Goods

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

REACH = Registration, Evaluation, Authorization and Restriction of Chemicals

CAS = Chemical Abstract Service

EN = European norm

ISO = International Organization for Standardization

DIN = Deutsche Industrie Norm

PBT = Persistent Bioaccumulative and Toxic

vPvB = Very Persistent and very Bio-accumulative

LD = Lethal dose

LC = Lethal concentration

EC = Effect concentration

IC = Median immobilisation concentration or median inhibitory concentration

Relevant H- and EUH-phrases (Number and full text)

H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.

The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.

The delivery specifications are contained in the corresponding product sheet.

This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

(n.a. = not applicable; n.d. = not determined)